

CHAPTER 7C. MARKINGS

Section 7C.01 Functions and Limitations

Support:

Markings have definite and important functions in a proper scheme of school area traffic control. In some cases, they are used to supplement the regulations or warnings provided by other devices, such as traffic signs or signals. In other instances, they are used alone and produce results that cannot be obtained by the use of any other device. In such cases they serve as an effective means of conveying certain regulations, guidance, and warnings that could not otherwise be made clearly understandable.

Pavement markings have limitations. They might be obliterated by snow, might not be clearly visible when wet, and might not be durable when subjected to heavy traffic. In spite of these limitations, they have the advantage, under favorable conditions, of conveying warnings or information to the road user without diverting attention from the road.

Section 7C.02 Standardization of Application

Standard:

Each standard marking shall be used only to convey the meaning prescribed for it in this Manual.

Section 7C.03 Crosswalk Markings

Support:

Crosswalk markings provide guidance for pedestrians who are crossing roadways by defining and delineating paths on approaches to and within signalized intersections, and on approaches to other intersections where traffic stops.

Crosswalk markings also serve to alert road users of a pedestrian crossing point across roadways not controlled by highway traffic signals or STOP signs.

At nonintersection locations, crosswalk markings legally establish the crosswalk.

Standard:

When transverse crosswalk lines are used, they shall be solid white, marking both edges of the crosswalk, except as noted in the Option. They shall be not less than 150 mm (6 in) nor greater than 600 mm (24 in) in width.

On state owned, operated, and maintained roadways, transverse crosswalk lines shall be 300 mm (12 in) in width.



Guidance:

If transverse lines are used to mark a crosswalk, the gap between the lines should not be less than 1.8 m (6 ft). If diagonal or longitudinal lines are used without transverse lines to mark a crosswalk, the crosswalk should be not less than 1.8 m (6 ft) wide.

Crosswalk lines on both sides of the crosswalk should extend across the full width of pavement or to the edge of the intersecting crosswalk to discourage diagonal walking between crosswalks.

Crosswalks should be marked at all intersections on established routes to school where there is substantial conflict between motorists, bicyclists, and pedestrian movements, where students are encouraged to cross between intersections, or where students would not otherwise recognize the proper place to cross (see Figure 7A-1).

Crosswalk lines should not be used indiscriminately. An engineering study should be performed before they are installed at locations away from traffic control signals or STOP signs.

Option:

For added visibility, the area of the crosswalk may be marked with white diagonal lines at a 45-degree angle to the line of the crosswalk or with white longitudinal lines parallel to traffic flow. When diagonal or longitudinal lines are used to mark a crosswalk, the transverse crosswalk lines may be omitted.

Guidance:

The diagonal or longitudinal lines should be 300 to 600 mm (12 to 24 in) wide and spaced 300 to 1500 mm (12 to 60 in) apart. The spacing design should avoid the wheel paths.

On State owned, operated, and maintained roadways, the diagonal or longitudinal lines should be 300 mm (12 in) wide.



Section 7C.04 Stop Lines

Standard:

If used, stop lines shall consist of solid white lines extending across approach lanes to indicate the point at which the stop is intended or required to be made.

Guidance:

Stop lines should be 300 to 600 mm (12 to 24 in) wide.

Stop lines should be used to indicate the point behind which vehicles are required to stop, in compliance with a STOP (R1-1) sign (see Figure 2B-1), traffic control signal, or some other traffic control device.

Guidance:

If used, stop lines should be placed a minimum of 1.2 m (4 ft) in advance of and parallel to the nearest crosswalk line at controlled intersections for in Section 3B.24 and at midblock crosswalks. In the absence of a marked crosswalk, the stop line should be placed at the desired stopping point, but should be placed no more than 9 m (30 ft) norless than 1.2 m (4 ft) from the nearest edge of the intersecting traveled way. Stop lines should be placed to allowsufficient sight distance to all other approaches to an intersection.

Stop lines at midblock signalized locations should be placed at least 12 m (40 ft) in advance of the nearest signal indication (see Section 4D.15).

Section 7C.05 Curb Markings for Parking Regulations

Standard:

Signs shall be used with curb markings in those areas where curb markings are frequently obliterated by snow and ice accumulation, unless the no parking zone is controlled by statute or local ordinance.

Guidance:

When curb markings are used without signs to convey parking regulations, a legible word marking regarding the regulation (such as “No Parking” or “No Standing”) should be placed on the curb.

Option:

Local highway agencies may prescribe special colors for curb markings to supplement standard signs for parking regulation.

Support:

Since yellow and white curb markings are frequently used for curb delineation and visibility, it is advisable to establish parking regulations through the installation of standard signs (see Sections 2B.39 through 2B.41).

Section 7C.06 Pavement Word and Symbol Markings

Support:

Word and symbol markings on the pavement are used for the purpose of guiding, warning, or regulating traffic. Symbol messages are preferable to word messages.

Standard:

Word and symbol markings shall be white. Word and symbol markings shall not be used for mandatory messages except in support of standard signs.

Guidance:

Letters and numerals should be 1.8 m (6 ft) or more in height. All letters, numerals, and symbols should be in accordance with the Federal Highway Administration's “Standard Highway Signs” book (see Section 1A.11).

Word and symbol markings should not exceed three lines of information.

If a pavement marking word message consists of more than one line of information, it should read in the direction of travel. The first word of the message should be nearest to the road user.

The longitudinal space between word or symbol message markings, including arrow markings, should be at least four times the height of the characters for low speed roads, but not more than ten times the height of the characters under any conditions.

The number of different word and symbol markings used should be minimized to provide effective guidance and avoid misunderstanding.

Except as noted in the Option below, pavement word and symbol markings should be no more than one lane in width.

Option:

The SCHOOL word marking may extend to the width of two approach lanes (see Figure 7C-1).

Guidance:

If the two-lane SCHOOL word marking is used, the letters should be 3 m (10 ft) or more in height.

Figure 7C-1. Two-Lane Pavement Marking of “SCHOOL”



